

# Landfill

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**Mission.** The Landfill Fund supports the operating expenses of Brooks Landfill, solid waste disposal issues, and environmental concerns.

**Overview.** Owned by the City, Brooks Landfill serves all of Sedgwick County. The landfill is on a 323-acre site located west of the Arkansas River and north of Highway K-96. It contains four cells for receiving solid waste. Cells A, B, and C are no longer active and are closed. Cell D is the only active cell.

From 1966 until 1981, the landfill was City operated. In 1981, it was turned over to a private contractor for operations. The landfill is open 362 days per year and 80 hours per week. An average of 1,500 tons of solid waste are received each day from 450 customers. Annually, the landfill processes approximately 200 disposal authorizations (issued by the Kansas Department of Health & Environment for special waste handling). Two weekends of free landfill access for private vehicles are sponsored each year, averaging 6,000 vehicles per weekend.



*Packer truck entering landfill.*

Brooks Landfill was constructed many years before the Environmental Protection Agency's (EPA) current regulations were enacted. The landfill does not meet the new EPA requirements and therefore does not have a valid permit to receive waste after October 9, 2001. After the landfill closes, tipping fee revenue will no longer be collected. To provide for post closure maintenance and environmental costs, tipping fee revenue is transferred annually to the Landfill Post Closure Trust Fund.

**Finance and Operations.** The City employs two inspectors to ensure regulations are followed with all solid waste received at the landfill, and to maintain the groundwater remediation equipment. The landfill operator directs the solid waste disposal and is responsible for covering waste as it is disposed. The operator is also responsible for the closure of Cell D.

Monitoring of groundwater quality surrounding the landfill revealed a plume of contamination. The containment and treatment of the contaminants presented a challenge due to imposed deadlines to

plan and construct the necessary treatment structures. The Groundwater Remediation System provides air-stripping containment and air sparging treatment of the contaminants. Both systems involve injection of air into the contaminated groundwater to vaporize the contaminants. The system became operational March 1, 1998. Tests confirm that groundwater leaving Brooks no longer has elevated contaminant levels. Groundwater is cleaned at the rate of 350 gallons per minute and discharged into the Arkansas River. The air sparging system at Brooks is one of the largest in the country, and the groundwater remediation system received the National Engineering Excellence Award by the American Academy of Environmental Engineers.

In March of 2000, City staff, along with contractors, excavated and removed the source of the groundwater contamination. Numerous containers holding hazardous materials were discovered and removed. Further monitoring will be performed to assure no additional contaminants remain at the site.

Installed in 1998, a gas collection system collects methane gas generated at Brooks and pumps the gas 11 miles to High Plains Corporation, where it is used to power equipment that produces ethanol. Approximately three million cubic feet of methane gas are produced each day.

New vegetative cover and drainage improvements are being constructed over Cell C in response to National Pollutant Discharge Elimination System (NPDES) requirements. The improvements will prevent future erosion of the topsoil.

The Household Hazardous Waste (HHW) Program provides a drop off site for HHW such as herbicides, paints, and insecticides. The facility receives about 330 tons of HHW per year that would otherwise enter the landfill.

A pilot program for disposing of hazardous waste produced by small quantity generators (businesses that generate 55 pounds of hazardous waste or less each month) was initiated with Federal and State grants. When the grant funding ended, local funding was requested to continue the Small Quantity Generator program. Because the program had proven to be successful for diverting significant quantities of hazardous waste from Brooks Landfill, tipping fee revenue was approved to fund the program through 2001. The addition of an Environmental Quality Specialist position was authorized with this program expansion. A commitment of Sedgwick County funding will be required to continue this program after the landfill closes in 2001.

Revenues for landfill operations and solid waste programs are generated from tipping fees collected at the landfill and from rental of property adjacent to the landfill for agricultural purposes. A private contractor operates the landfill and collects the tipping fee revenue. The contractor retains \$5.97 of the \$26.00 per ton tipping

fee; the State collects \$1; and the Landfill Fund receives the remaining \$19.03.

The 2000 and 2001 budgets reflect continuation of the \$26 per ton tipping fee through landfill closure on October 9, 2001. Revenues provide for closing the landfill; monitoring the groundwater remediation system; continuing the household hazardous waste program; upgrading the cap on Cell C; providing for an environmental education program; and maintaining the gas management system. The budget also includes funding for many other neighborhood and environmental programs, shown in the following table. Continuation of these programs will require an alternate funding source after Brooks Landfill closes in 2001.

After Brooks landfill closes, solid waste disposal will be the responsibility of Sedgwick County. The County will develop transfer stations, where trash will be collected and shipped to distant landfills. Tipping fees are expected to increase from \$26 per ton to at least \$40 per ton. If the City disposes of its waste through the transfer stations, operating expenses are expected to increase by at least \$3.5 million, or nearly two mills, per year.

Programs Funded by Landfill Tipping Fees			
	1999	2000	2001
Household Hazardous Waste Program	345,936	440,000	440,000
Bulky Waste Program	16,386	75,000	75,000
Neighborhood Cleanup	22,350	75,000	75,000
Neighborhood Environmental Court	20,000	20,000	20,000
Environmental Education Program	256,857	222,700	222,700
Christmas Tree Recycling	31,250	50,000	50,000
Recycle Centers	129,675	119,700	119,700
<b>Total</b>	<b>822,454</b>	<b>1,002,400</b>	<b>1,002,400</b>

To avoid this costly future, a construction and demolition (C&D) landfill is proposed. The 2000 Revised budget includes \$3.5 million set aside for acquisition and development of a C&D site. Operating costs are included beginning in late 2001, and the Bulky Waste, Neighborhood Cleanup, and Indigent Trash programs are proposed for funding from C&D landfill revenues.

Landfill Fund Budget Summary					
	1999 Actual	2000 Adopted	2000 Revised	2001 Adopted	2002 Approved
<b>Landfill Fund Revenue</b>	<b>10,819,690</b>	<b>9,958,180</b>	<b>10,235,950</b>	<b>8,252,940</b>	<b>2,804,030</b>
Personal Services	242,999	259,790	237,880	255,780	130,950
Contractual Services	1,839,009	2,365,610	2,736,820	4,290,230	2,021,250
Commodities	24,955	60,620	60,400	60,400	10,000
Capital Outlay	7,900	0	0	410,000	0
Other	321,380	1,092,130	3,989,910	474,580	523,270
Transfer to Post Closure Trust Fund	8,500,000	11,000,000	11,000,000	4,105,000	0
<b>Total Landfill Fund Expenditures</b>	<b>10,936,243</b>	<b>14,770,580</b>	<b>18,025,010</b>	<b>9,595,990</b>	<b>2,685,470</b>
Revenue Over (Under) Expenditures	(116,553)	(4,812,400)	(7,789,060)	(1,343,050)	118,560
<b>Landfill Fund Balance</b>	<b>9,345,622</b>	<b>365,995</b>	<b>1,556,562</b>	<b>213,512</b>	<b>332,072</b>
<b>Position Summary</b>					
Total full-time	3	3	3	3	2
Total part-time	0	0	0	0	0
Total FTE	3	3	3	3	2